ABSTRACT

A method and an apparatus of inspecting the surface of a wafer, where two or more kinds of laser are switched or mixed to make the laser incident on the film-coated wafer by a same incident angle, in which inspection data regarding an inspection apparatus and film parameters regarding a film are stored in storage means of the inspection apparatus in an associated state with each other so as to obtain predetermined inspection conditions. When performing each measurement, an operator sets the film parameters of the wafer to be measured by setting means of the inspection apparatus. Thus, desired inspection conditions are automatically set in the inspection apparatus. The film parameters that the operator sets at each measurement are a film thickness and a film refraction index.